From Coronado to Cattlemen

Assessing the Legacy of 19th-Century Cattle Trails on the Southern High Plains

The years following A.D. 1250 witnessed the intensification of trade among Native American villagers on the southern High Plains. Though their economic interaction is certain, archeologists' ability to map the pathways that linked these Plains horticulturalists is incomplete—isolated to a series of east-west routes that connected the southwestern Pueblos with the Plains and Mississippian trade networks (Kelly 1955; Vehik 1986). The occurrence in Plains villages of artifacts made out of certain kinds of stone from source locations to the north and south confirms that the north-south movement of peoples and technology was an important aspect of the economy; however, the corridors favored for such traffic are yet to be discovered.

Beyond the southern High Plains, archeologists are assured that a vast network of roads linked trade centers of pre-Columbian America. This web of highways was first mentioned in the written accounts of early European explorers. Later, archeologists confirmed trail locations by identifying a series of Native American town sites containing significant quantities of non-local materials (Ewers 1954; O'Brien 1986; Riley 1976; Wood 1980, 1983).

Our approach is the same. This article reports on the use of published historic documents to locate a possible prehistoric north-south route on the southern High Plains. Subsequent field research, including archeological survey and geomorphological studies, attempted to substantiate claims that nineteenth-century cattle trails previously were used by prehistoric groups who occupied the southern High Plains. The Late Prehistoric use of these trails as trade routes, followed by their historic use to transport cattle, suggests that these trails may have been active during the Protohistoric period when Coronado's entrada entered the southern and central Plains. Though our results are inconclusive, recommendations for further research in other locations are offered.

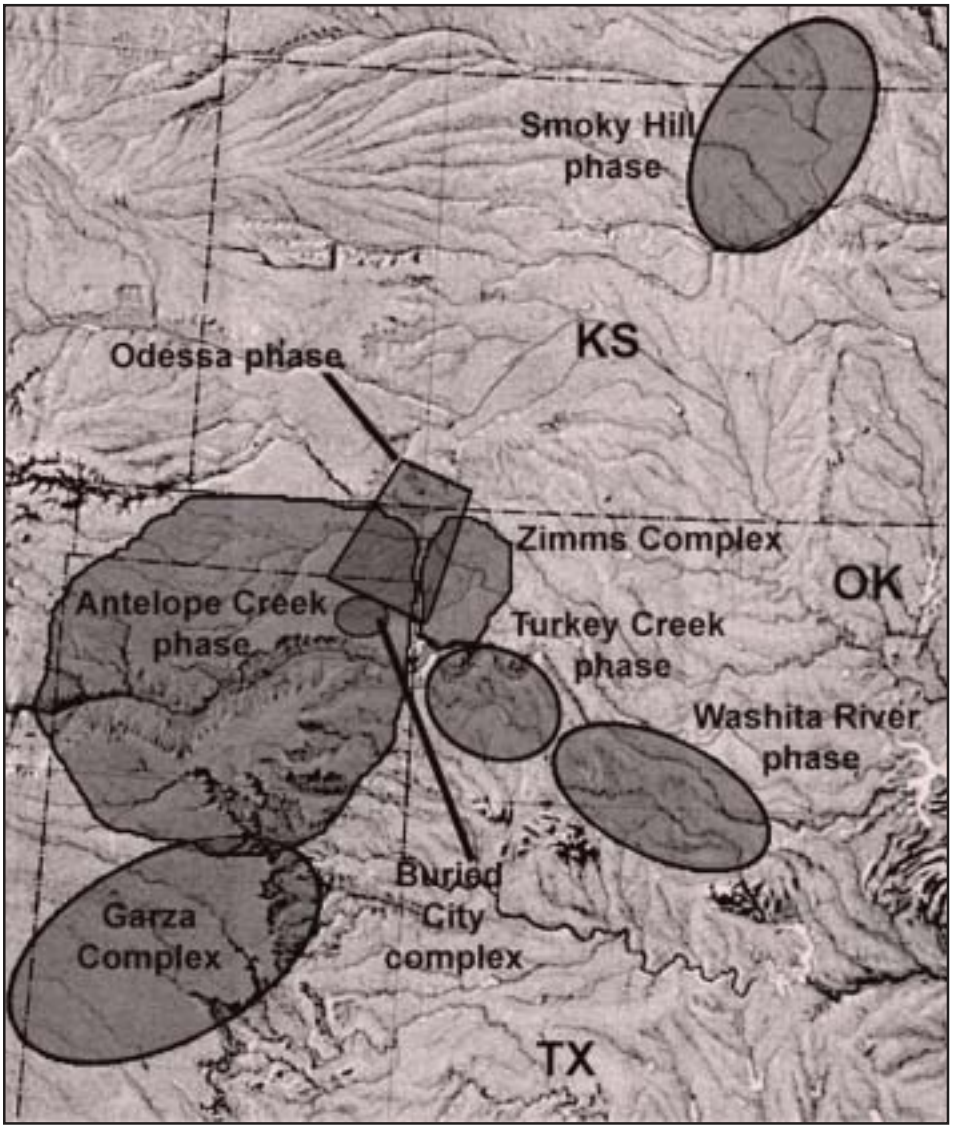

Figure 1. Late Prehistoric and Protohistoric cultural complexes.

Trade on the Southern High Plains, A. D. 1250–1540

Interregional trade developed on the southern High Plains during the Late Prehistoric period. Cooler and wetter conditions prevailed, allowing horticulturalists to move onto the High Plains for the first time. Local economies varied depending on their locations but consisted primarily of hunting supplemented with horticulture. The High Plains villagers include, among others, the Antelope Creek phase, Odessa phase, and Buried City complex, with the Zimms complex and Washita River phase in the adjacent Redbed Plains (Figure 1). These developments are substantiated archeologically by the presence in semi-sedentary village sites of exotic materials—stone types and ceramic styles, in

particular—that presumably were acquired from more distant villages (Baugh and Nelson 1987; Drass 1997; Hughes 1991; Lintz 1986, 1991). Trade probably developed as an aspect of political leadership. Authorities likely secured power through their ability to establish and sustain trading partnerships with foreign villagers—a relationship that would result in the increased occurrence of non-local resources in elite or non-utilitarian contexts. Such items were most commonly procured from Puebloan groups of the Southwest, Smoky Hill phase peoples to the north, and/or Caddoan peoples to the east (Vehik 2002).

Following a period of warmer and drier conditions, villagers found the High Plains environment less suited for horticulture. They either adopted a more nomadic life dependent upon bison or moved north and east to join other villagers where the climate could still support maize horticulture. Evidence for trade centers on the High Plains is nonexistent during the Protohistoric period, yet connections between the Pueblos and the Plains villagers continued—a reality that perhaps favored the continuation and importance of east-west trade routes (Baugh 1982; Drass and Baugh 1997; Spielmann 1991; Vehik 1990). North-south interactions on the High Plains would have served a more vital purpose to the nomadic peoples known archeologically as the Garza complex (likely Apachean) whose movements were seasonal, based on bison migrations. The protohistoric Garza complex, identified by Coronado as the Teya and Querecho Indians, continued to play a role in the Pueblo-Plains trade network, as did traders from the eastern Plains villages (Habicht-Mauche 1992; Kelly 1955; Wedel 1982).

Historical Research: Establishing Corridors, A.D. 1540-1900

The historical documentation that followed Europe's introduction to the Americas helps in identifying prehistoric trail locations. The first Spanish conquistadors to enter the southern Plains were Coronado and his men, searching for the golden city of Quivira. In 1541, Coronado's expedition headed east from Pecos pueblo on the front range of the Rocky Mountains. Their guide, the Turk, was a Wichita Indian man who volunteered to lead the expedition to Quivira. The first part of Coronado's route east was well documented, and historians have traced his movements across New Mexico with great certainty (Riley 1997a).

Figure 2. Proposed routes traveled by Coronado.

Published translations of the expedition's diary indicated that an increasing desperation set in as the party moved along the Llano Estacado in what is today the Texas panhandle. When they reached the eastern edge of the Llano, Coronado was informed that he had been misled—that Quivira was located, not to the east, but to the north. Enraged at being deceived, Coronado had the Turk executed and directed his force to separate. The largest group returned to Pecos Pueblo, while a smaller division, led by Coronado, followed the Teyas north to Quivira (Riley 1997b; Hammond and Rey 1940).

At this point of the trip, Coronado's chroniclers lost the meticulous attention to detail that they demonstrated during the journey across the New Mexico and Texas plains. In fact, the many days that the expedition followed the Teyas are represented in the narrative by only two paragraphs that make no mention of significant landmarks. Beyond the characterization that the party was moving "north by the needle," very little can be drawn from the primary accounts to reconstruct this northern portion of the route (Hammond and Rey 1940).

Previous archeological research helped fill in the gaps in the Coronado account and gave a starting point for isolating possible routes. Investigations in the Texas panhandle uncovered what is most likely one of Coronado's camps on the eastern edge of the Llano Estacado. The Jimmy Owens site is near Floydada, Texas, and may be the spot where the expedition met the Teyas and started moving north (Cornett 1997). Though little has been found to confirm the expedition's presence between the lower Texas panhandle and Quivira, popular belief holds that Coronado probably crossed the Arkansas River at the natural ford near present-day Ford, Kansas. From there, the Teya guided Coronado to the Wichita Indian villages on the Great Bend of the Arkansas River, known archeologically as the Little River focus (Vehik 2002). Coronado identified these villages as the cities of Quivira. Though he was discouraged by the lack of gold, he did not travel farther east but ultimately decided to return to

Authors Brice Obermeyer and Scott A. Sundermeyer were University of Oklahoma graduate students when they undertook this research, which was funded by the University of Oklahoma Graduate Student Senate. Volunteers from the Oklahoma Anthropological Society, University of Oklahoma Anthropology Department, Kansas State Historical Society, and Meade County Historical Society and area landowners provided much needed assistance. Obermeyer has since received his Ph.D. in cultural anthropology and is working as the Cultural Preservation Director for the Delaware Tribe of Indians in Bartlesville, Oklahoma. Sundermeyer earned a M.A. and is now Project Archaeologist with LOPEZGARCIA GROUP in Dallas.

the Pueblos. He did so under the direction of an indigenous guide who followed a different route, later called the Santa Fe Trail (Hammond and Rey 1940) (Figure 2)

The archeological information, along with the scant historical documentation of the route, provided at least beginning and ending points for the intermediate northern leg of Coronado's journey. Based on existing data, three general corridors have been proposed and are reproduced in Figure 2 (National Park Service 1992). The westernmost corridor leaves the bend of the Canadian River, goes north to Palo Duro Creek, and heads northeast to the Arkansas River. The middle corridor begins on the eastern edge of the Llano Estacado near Palo Duro Canyon and travels north by northeast along the eastern edge of the High Plains. The easternmost corridor is the longest, beginning near the Concho River in Texas and running almost directly northeast through western Oklahoma and Kansas until it reaches the Arkansas River.

Judging the corridors in relation to the Late Prehistoric village complexes, all three probably were trade routes as each links sites that yield evidence of large-scale trade. The westernmost corridor connects one of the most significant resources on the southern High Plains, the Alibates Flint Quarries near present-day Fritch, Texas, and the associated Antelope Creek complex with the Pueblos to the west and the Smoky Hill phase to the northeast. Ceramic artifacts and obsidian from the Pueblos are present on Antelope Creek phase sites, and Alibates agatized dolomite is found in Smoky Hill phase villages (Lintz 1986; Vehik 2002). The central corridor connects the Odessa phase and Buried City complex with the Pueblos to the west and the Smoky Hill phase to the northeast. Southwestern artifacts are a distinguishing feature of Buried City complex and Odessa phase villages, but the higher occurrence of Smoky Hill jasper on these sites suggests a stronger connection with the central Plains groups (Hughes 1991; S. Brosowske, personal communication 2000). The eastern corridor connects the Turkey Creek phase and the Zimms complex with the Smoky Hill jasper sources in northwest Kansas. Non-local stone types are abundant on the Turkey Creek and Zimms sites, and both cultural complexes exhibit more evidence for trading relationships with Caddoan peoples to the east. Puebloan artifacts are rare, although they do occur (Drass 1997).

Because the archeological record supports the possible existence of three major prehistoric trade routes on the southern High Plains, we were presented with the difficulty of confirming each route's prehistoric origin and determining the most probable corridor. Our solution was to identify the route most frequently used after the prehistoric period. We initially focused on the first written account of north-south movement on the southern High Plains—that of Coronado's expedition. Based on the existence of the possible Coronado campsite on the eastern edge of the Llano Estacado, the western corridor seemed the least likely to have been used by Coronado. The nearly linear relationship between the Floydada, Texas, campsite and the crossing near Ford, Kansas, suggested that the central corridor was the most likely route. We had yet to rule out the eastern corridor.

The immense land area to be covered by a proposed on-the-ground survey dictated that we limit our study area. To do so, we turned to the next major well-documented north-south movements on the southern High Plains; that is, the trails marked in the late-nineteenth century to carry out the extermination of the bison and the introduction of cattle ranching. Following the Civil War and the confinement of Plains Indians to reservations in Indian Territory, the federal government embarked on the annihilation of the remaining bison herds that roamed the southern High Plains. Professional hunters, headquartered in Dodge City, Kansas, were paid to travel south into the Texas panhandle to locate the bison and return with their hides and carcasses, which were then shipped by railroad to markets in the eastern United States. Trails from Texas into Kansas (Figure 3) were marked and posts established to facilitate this effort (Baker and Harrison 1986). The Tascosa Trail followed the western corridor, and the Jones and Plummer Trail followed the central corridor. The eastern corridor was not utilized in the bison slaughter, but it did encompass an important route for the U.S. military and its expeditions against the Cheyenne and Arapaho in the 1860s (Briscoe 1992).

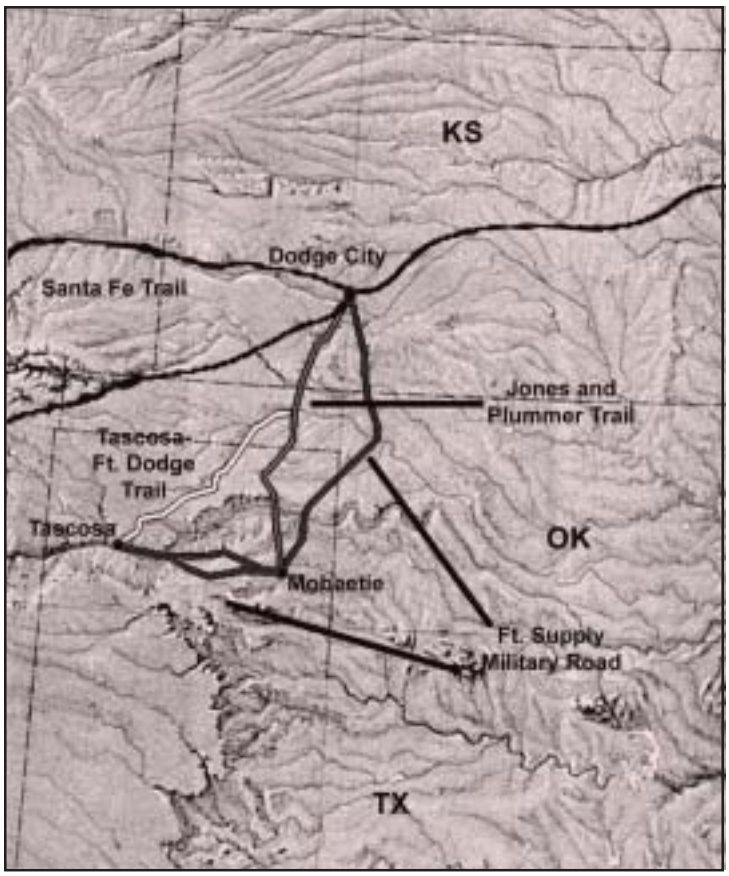

Figure 3. Historic trails documented in the southern High Plains.

The fact that each road followed an existing corridor proposed for Coronado's route indicated that the late-nineteenth-century roads represented geographically favorable routes for north-south movement on the southern High Plains. Because the Jones and Plummer Trail effectively followed the central corridor, our research was concentrated there. Two simple forms of evidence were sought to test the probability of prior use of the Jones and Plummer Trail. First, diagnostic artifacts, such as chain mail or crossbow nails, or an occupation area could indicate Coronado's presence. Second, remains of a previously undocumented prehistoric village with indications of trade between the villages of the Odessa phase or Buried City complex and those of the

Smoky Hill phase would provide a more linear progression between the two culture areas, thereby substantiating the existence of a north-south route on the southern High Plains.

Results of the Jones and Plummer Trail Archeological Survey

To test our research question, we conducted a pedestrian survey in the summer of 2000 that focused on locations where the Jones and Plummer Trail intersected two major river drainages: the Cimarron River and Crooked Creek in southwest Kansas (Figure 4). Our crew consisted of volunteers from the Oklahoma Anthropological Society, Kansas and Oklahoma university graduate students, and interested area enthusiasts. During the four-day survey, we covered selected portions of the landscape, mainly along the first and second terraces above the alluvial flood plains.

Figure 4. Survey areas covered in the summer of 2000.

Figure 5. Alluvial floodplain and terrace deposits near the Cimarron River.

Our search for evidence of a Coronado campsite or a Plains village site went unrewarded, but we did record two historic and two prehistoric sites. The historic sites date to the early twentieth century and confirmed the existence of two post offices that served the Anglo-American frontier communities of Odee and Miles City, Kansas. Both post offices were located directly on the Jones and Plummer Trail, indicating the continued importance of this route for American settlement following the development of the Texas cattle economy. One of the two prehistoric sites occurred near an artesian well on the second terrace above the south bank of Crooked Creek. The site was poorly preserved as a modern structure obscured what seemed to be a substantial portion of the site. Chipped stone debris of local origin was found in the vicinity of the building. The other prehistoric site was a campsite situated on an eroded alluvial fan on the first terrace on the north side of the Cimarron River. The site appeared to have some integrity and was designated based on the presence of a few stone flakes from a locally available resource and a possible fire-cracked rock. No diagnostic artifacts were found at either site, but the stone was later identified as Day Creek dolomite, likely to be from local outcrops in southwestern Kansas.

Although our survey did not locate sites with diagnostic artifacts dating to the Late Prehistoric period, the existence of such sites in the study area cannot be ruled out. No subsurface testing was performed on this pedestrian survey. Investigations of the cutbanks along the Cimarron River and Crooked Creek revealed that the surface sediments in many locations along the floodplain consist of a thick layer of recently deposited sand (Figure 5). Therefore, only those sites located along prominent terraces that were unaffected by the periodic flooding episodes characteristic of the two streams would be visible. Cutbank exposures within the drainage channels could be more closely inspected to identify deeply buried cultural material or features. A second possibility is that river erosion has destroyed the archeological sites. If prehistoric villages existed along the floodplain and first terrace of the Cimarron River more than 600 years ago, their remains may have either been washed downstream or deeply buried beneath alluvial sediments. We can say with confidence that no evidence of Late Prehistoric occupation or Coronado's expedition is found on the surface in these two river drainages in the vicinity of the Jones and Plummer Trail. Such evidence, however, may be present in subsurface contexts.

Conclusion

Our research suggests two possible avenues for further research: a more intensive subsurface investigation of the areas already surveyed along the Jones and Plummer Trail or a pedestrian survey of the trail-riverine intersections within the western and eastern corridors. Though all three corridors remain possibilities for prehistoric trade routes, we are convinced that the location of the Coronado campsite east of the Alibates Flint Quarries indicates that the central and eastern corridors are the most probable paths for Coronado's expedition.

The contribution of this research is not the definitive identification of a north-south trade route but in the development of a method for locating such prehistoric highways. The use of historic documents to guide archeological research is not a novel idea, but it is an approach that we believe is well suited for locating the trails that linked the emerging Late Prehistoric trade economy of the southern High Plains and, by extension, the routes of European-Native American contact.

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